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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,299	02/17/2004	Patrick Calahan	BEAS-01330US1 SRM/DTX	9743
23910	7590	09/08/2006	EXAMINER TO, BAOQUOC N	
FLIESLER MEYER, LLP FOUR EMBARCADERO CENTER SUITE 400 SAN FRANCISCO, CA 94111			ART UNIT 2162	PAPER NUMBER

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/780,299

Applicant(s)

CALAHAN, PATRICK

Examiner

Baoquoc N. To

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1 and 3-12 are amended and claim 34 is canceled in the amendment filed on 06/21/2006. Claims 1-33 are pending in this application.

### ***Response to Arguments***

2. Applicant's arguments with respect to claim 1, 13, 23 and 33 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (Pub. No. 2004/0167864) in view of kozlov (Pub. No. 2003/0221168 A1) and further in view Beauchamp et al. (US. Patent No. 6,621,505 B1).

Regarding on claims 1, 13, 23 and 33, Wang teaches a computer-implemented system to process XML document, comprising:

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A streaming parser operable to parse an XML document and generating a stream of events, wherein each event in the stream can represent a portion of the document (paragraph 0043, lines 3-5);

A matching component (paragraph 0043, line 19) operable to:

accepting the stream of events from the streaming parser (paragraph 0043, lines 7-10);

performing matching on an event in the stream (paragraph 0043, lines 19-22); and

Wang does not explicitly teach keeping in memory only a subset of the stream of events at any time; notifying an observer if the event is a match; said observer operable to listen for a matching event and passing it to a user object; and said user object operable to handle the matching event. However, Kozlov teaches keeping in memory only a subset of the stream of events at any time as to a check is made to determine whether child element of the current element can be removed from memory. This is the case when all child elements and their descendants have already been formatted in step 208...(paragraph 0048, lines 1-7). Suggestion from Kozlov due to the insufficient memory, only the current elements are kept in the memory. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Wang's system by keeping in memory only a subset of stream of events as the system only requires to maintain those current stream of data in the memory to enhance system performance. On the other hand, Beauchamp teaches notifying an observer if the event is a match; said observer capable of listening for a matching event

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and passing it to a user object; and said user object capable of handling the matching event (col. 21, lines 15-29). This suggests the concept of notifying the system to update the changes by the monitor. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Wang's system to maintain the current data elements in the memory at a given time as taught from Kozlov and incorporate event notification as taught by Beauchamp to allow the system to continuously process data when the parsing process is completed.

Regarding on claim 2, Wang teaches the system recited in claim 1, wherein the XML document is represented in a hierarchical structure (tree node) (paragraph 0043, lines 8-10).

Regarding on claims 3, 13 and 24, Wang teaches the system according to claim 2, wherein the hierarchical structure is a tree with each node containing a portion of the document (tree node containing a event 27) (paragraph 0043, lines 7-10).

Regarding on claims 4, 15 and 25, Wang teaches the system according to claim 3, wherein the streaming parser is operable to perform a method, comprising:

Traversing the XML tree and adding visited nodes into a data structure (paragraph 0043, lines 39-43);

Processing the nodes in the data structure and generating an event for each node (paragraph 0043, lines 39-43); and

Appending the event to the output stream (paragraph 0043, lines 39-43).

Regarding on claims 5, 16 and 26, Wang teaches the system according to claim 4, wherein the tree is traversed using a breath-first or depth-first search (paragraph 0044).

Regarding on claim 6, Wang teaches the system according to claim 4, wherein the data structure can be a queue (paragraph 0057).

Regarding on claims 7, 17 and 27, Wang teaches the system according to claim 4, wherein the data structure is processed using a first-in-first-out approach (paragraph 0044).

Regarding on claims 8, 18 and 29, Wang teaches the system according to claim 1, wherein the matching component is operable of keeping only a portion of the XML document in memory at any given time (paragraph 0043, lines 17-20).

Regarding on claims 9, 19 and 30, Wang teaches the system according to claim 1, wherein the matching component is operable to know the schema of the XML document and foreseeing the coming events (page 4, paragraph 0036, lines 8-10).

Regarding on claims 10, 20 and 28, Wang teaches the system according to claim 1, wherein the matching component is an expression-based matched, which can be an Xpath query (xpath query) (paragraph 0035, line 14).

Regarding on claims 11, 21 and 31, Wang teaches the system according to claim 3, wherein the matching component is operable to keep, cloning and destroying the entirely or a portion of the sub-tree descending from a node in the tree (paragraph 0045).

Regarding on claims 12, 22 and 32, Wang teaches the system according to claim 1, wherein the user object is operable to return the matching event to an XML stream for use by any other component (paragraph 0043).

### **Conclusion**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-4041, or unofficial fax number for the purpose of discussion (571) 273-4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(571) -273-8300 [Official Communication]

BQ To

August 29th, 2006

  
JEAN M. CORRIELUS  
PRIMARY EXAMINER